

REMARKS

In the Office Action dated May 9, 2006, the Examiner rejected claims 1, 2, and 6-8 under 35 U.S.C. §102(b) as being anticipated by *Aoki* (U.S. Patent No. 3,807,920). Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Aoki* in view of *Taha* (U.S. Pat. No. 6,551,093). Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Aoki* in view of *Ochs et al.* (U.S. Pat. No. 4,803,031). The Examiner further rejected claims 5 and 20 under 35 U.S.C. §103(a) as being unpatentable over *Aoki* in view of *Yanagihara et al.* (U.S. Pat. No. 5,922,369). Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Aoki* in view of *Olaru* (U.S. Pat. No. 6,936,199). Claims 10-19 are allowed. Claims 1, 6-9, 15-18, and 20 have been amended. For the reasons given below, Applicants respectfully submit that the reference fails to disclose, teach, or even suggest the presently claimed invention, and request that the rejection of the claims be withdrawn.

Telephone Interview

Applicants would like to thank Examiner Heitbrink for the courtesies extended to Applicants' representatives during the telephonic interview held on August 28, 2006. Participants of the interview included Examiner Heitbrink and Applicants' representatives Sean Sullivan and Jori Schiffman. No exhibits were shown nor demonstrations conducted. The participants discussed independent claims 1 and 20, as well as the *Aoki* and *Yanagihara* references. Further, Applicants provided the Examiner with background information regarding the differences between hot runner and cold runner systems. Applicant's representatives explained to the Examiner why the instant invention is distinguishable from *Aoki* (see below).

As a result of the interview, the Examiner agreed that the *Aoki* reference does not have a nozzle in direct communication with the cavity.

Present Application

The present application provides an injection molding apparatus in a *hot runner system* that allows for simultaneous molding of seal liner components and shell components over the seal liner components in separate cavity chambers to form integral, one-piece products, such as closures, with improved sealing characteristics. Injection molding of a product with an integral sealing layer is not only relatively simpler and less expensive than the methods of the prior art, but it also provides a product with an improved seal between the product and its respective counterpart, such as a bottle or container. A rotation or shuttling system is also included in the injection molding apparatus.

Claims 1 and 20 as amended provide an injection molding apparatus for molding products comprising a first cavity chamber for forming a seal liner, with the first cavity chamber having an outer edge, and a second cavity chamber for forming a shell, with the second cavity chamber having a center and being adjacent to the first cavity chamber. The injection molding apparatus also comprises a first nozzle for a seal liner material positioned near the outer edge of, and in *direct* communication with, the first cavity chamber, and a second nozzle for a shell material positioned near the center of, and in *direct* communication with, the second cavity chamber.

Rejection under §102(b)

The Examiner rejected claims 1, 2, and 6-8 as being anticipated by *Aoki*. Applicants respectfully disagree. *Aoki* discloses a multicolor injection molding machine in a cold runner system. *Aoki* includes a plurality of injection devices for injecting different colors of a molten resin material into partial forming cavities via one or more runners.

According to M.P.E.P. §2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, *Aoki* does not disclose an injection molding apparatus having nozzles in ***direct communication*** with their respective cavities. Rather, *Aoki* teaches a nozzle in indirect communication with the cavity, as seen in the figures, since the resin material must travel through a plurality of runners 22 before reaching the cavity. Thus, each and every element of the claims is not disclosed, and therefore the rejection is improper and should be withdrawn.

Moreover, *Aoki* fails to disclose or suggest a nozzle having a tip angled with respect to the body of the nozzle, as recited in amended claim 8. Furthermore, there would be no benefit of using an angled tip in the nozzles of *Aoki* since runners exist between the nozzles and the cavities. Thus, for this further reason, the rejection is improper and should be withdrawn.

Rejection under §103(a)

Regarding claim 20, the Examiner admits that *Aoki* does not disclose a manifold to feed the material to the mold cavities, and states that *Yanagihara* teaches that it is conventional to use

manifolds to feed material to a mold cavity. However, neither *Aoki* nor *Yanagihara* disclose or suggest first and second nozzles being in *direct* communication with the cavity chambers, as recited in amended claim 20. In fact, *Aoki teaches away* from the use of directly connected nozzles because of *Aoki*'s requirement that the resin flow through narrow runners before entering the cavity. Without these runners being present, *Aoki* would not be able to function as intended. If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). Thus, the rejection is improper and should be withdrawn.

Moreover, to establish a prima facie case of obviousness under §103 there must be some suggestion or motivation to combine or modify the cited references, and the cited references must teach or suggest all the claim limitations. (MPEP § 2142). Applicants contend that no motivation exists for combining *Aoki* and *Yanagihara* or *Aoki* and *Olaru* to obviate the present claims. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. (MPEP § 2143). Thus, “[i]n determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.”” (MPEP § 2143.01). Consequently, to make a successful §103(a) obviousness rejection, the Office must show some objective teaching in the prior art or explain how one of ordinary skill in the art would be motivated to combine the relevant teachings. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

Applicants submit that there is no teaching or suggestion within *Aoki*, *Yanagihara*, or *Olaru* to make the proposed combination. *Aoki* is directed toward a multicolor injection molding machine in a cold runner system, *Yanagihara* is directed toward an apparatus for making a lens for a vehicle in a hot runner system, and *Olaru* is directed toward a method and apparatus for measuring the temperature of molten material in a mold cavity in a hot runner system. None of the references include a suggestion or motivation to combine with any teachings of the other references.

Furthermore, the Examiner has not shown any objective teaching in *Aoki*, *Yanagihara*, or *Olaru* to explain how one of ordinary skill in the art would be motivated to combine their teachings. The Examiner contended that "Yanagihara discloses manifolds 22 and 24 to be material to a mold cavity to be conventional." (Office Action p. 3). The Examiner further contended that "Olaru discloses using thermal-gated and valve gated nozzles in the same apparatus to feed two different cavities to be conventional." (Office Action p. 3). The Examiner did not provide any motivation as to how one of ordinary skill in the art would be motivated to combine the teachings of *Aoki* with *Yanagihara* or *Olaru*. Applicants respectfully submit that there would be no motivation for one of ordinary skill in the art to combine *Aoki* with *Yanagihara* or *Olaru* because *Aoki* deals with cold runner systems and is not concerned with the components of hot runner systems, as disclosed in *Yanagihara* and *Olaru*.

The remaining references cited by the Examiner, *Taha* and *Ochs*, fail to remedy the deficiencies of *Aoki*, and thus the rejections of all of the pending claims are improper and should be withdrawn.

Conclusion

In view of the foregoing, Applicants respectfully request that all of the rejections of the pending claims be withdrawn. Applicants hereby earnestly solicit an early Notice of Allowance. If for any reason, the application is not considered to be in condition for allowance on the next Office Action and an interview would be helpful to resolve any remaining issues, the Examiner is requested to contact the undersigned at (312) 913-3334.

Respectfully submitted,

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